

# The Higgs Bubble

as the

# The Feldman Anomaly

by

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Including the Электрон-Матрешка-Космос

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Let me start with the sincerest apology if this theory infringes on any other published papers of a similar nature. The field of particle physics and quantum mechanics is overflowing with theories, and my limited research has not found similar theories. This theory of a Higgs Bubble as The Feldman Anomaly is far outside present bubble theories.

## PREFACE TO THE THEORY

Quantum questions can be asked, but answers cannot always be explained with language or mathematics as a language. Some of the invisible gears of our existence can best be understood only in our minds. Mathematics is only another language to describe the realm that we sense as existence. My lifelong search was for a linguistic solution to what we consider to be our reality. Can we understand the deepest questions of reality with our limited senses and inadequate metrology? Currently, the answer is obviously—no!

Add to that, we should never be so bold as to establish an understanding of what our limited senses perceive of our universe as a baseline for deviations from reality. We are as far from the size of an elemental particle as we are from the vastness of our universe. In terms of what we call “temperature,” we are actually nearly at the frozen zone of the energy spectrum. Our vision is nearly completely blind with regard to what we call electromagnetic radiation. With regards to our “vision” of our universe and what we call “matter,” we are nearly blind to it all, with our senses nearly useless except to find food, a mate, and not get eaten by another creature.

“Prepare your mind for a new scale of physical scientific values. 1”

It always seems that nothing exists until we interact with it. Metrology, such as at CERN, must take the place of our senses. Invisible particle collisions become visible via metrology and then interpreted via software and displayed via technology.

The existence that we are an actor in, must have started at the pre-quantum level and evolved into more complex “objects” with specialized traits or behaviors, but why or better still, how? At the present time we have events

such as uranium 238 evolving to lead 206 at almost four billion years, which is believed to be proof that our universe will become cold and thus dead. But I believe otherwise. Perhaps our universe will end quickly and in the prime of its life—the whole universe in a blink.

Does a proton exist to make atoms, and atoms to make molecules? Is that “life” other than the start of organic life? What resources do protons have to become a proton with their complex guts and energies? What is the prime mover, the attribute that causes energy to become the guts of what we call particles or even elemental particles? Is energy only strings with inertia behaving as something that then becomes, let’s say, the guts of a proton or neutron when we bump into it? It still seems that many steps are missing. However, as some or many suspect, there is no proton until we touch it or break it. Thus, it exists without guts—until after the fact.

If we are to have a hydrogen atom, sometime after the Big Bang, due to cooling and the Higgs field, we must contend with a universe without a Higgs field. What properties would that possess? None and without time and with nearly infinite space—because there is no infinity.

We tend to think in terms of life having evolved from simple to complex. Is this how atoms are formed? It would seem not. Yet, they can be broken apart, in which some pieces, by natural actions, become other particles with different properties. Do any of you believe that what we perceive as pieces of our reality—have evolved from simpler pieces? Yes, we do believe it when we believe in the Big Bang—an explosion of energy resulting in the dozens of various elemental particles becoming atoms and expanding outward through space—and with no understanding of what is “space.”

We run into another dead end when we imagine a singularity possessing all the energy of the universe in one small point. How small was such a singularity? That singularity was energy in the simplest form. Where did it come from, and why was it created? More importantly, why did it explode—as we understand explosions? How big was it to hold an entire universe of billions of galaxies with billions of suns dying to create our elemental chart and all the elements clumped into trillions of planets? Perhaps it’s not the amount of energy in the primeval singularity, but rather the properties of the space that it existed in. You keep hearing of “space-time,” and now is the moment that we take that seriously. We can’t have one without the other.

Imagine an electron-sized singularity exploding to become our entire universe of trillions of galaxies with even more stars and planets, plus interstellar dust and energy. It would seem to take a singularity of about 1 million light-years in diameter to collect that much energy into one spot—black hole notwithstanding. The reason we don’t consider that is that it seems to be easier to imagine a small, grapefruit-sized singularity as being spontaneously created at some unimaginable temperature in an empty to-be-filled universe, than a 1 million light-year-sized diameter singularity.

Something that I find greatly disturbing is the use of a waveform in frequencies and amplitudes to represent the intensity of electromagnetic energy. I believe it is incorrect and misleading; the light double-slit experiment misleads our thinking as we try to visualize the invisible and represent it as an analog equivalent.

It is easy for me to believe that we do not need to balance matter and antimatter and that the universe we know can consist of mostly matter, without a need to be balanced in charge. A magnet with only one pole. A proton consists of energy until we crack it open. Are the guts created at that moment? We measure what comes out of its destruction but is that what makes a proton a proton—I’m thinking of “proton Oobleck.”

It is easy to understand why physicists believe they can mathematically define the universe of energy behaving as matter, because there is a consistency in the energy’s behavior, especially in electrical or magnetic fields. I suppose I should include gravity fields and weak and strong nuclear forces. Look at *The Review of Particle Physics* (Particle Data Group) and its half-million equations that no one has been able to string together as popcorn on a Christmas tree. Is there particle DNA?

Gravity might shake out without any investigation into it if the correct understanding of fundamental particles is ever figured out. It would be formidable if we could imagine the Big Bang with energies dispersing in straight lines for a moment before they entangle with their neighbors to create the plethora of particles once the Higgs field becomes real. We get back to that horrible idea that a particle does not exist until we measure it, which might unfortunately be true. Therefore, a proton is only a proton until it is cracked, and by default, its subatomic particles appear that we mistakenly believe are parts of the proton.

It should be extremely obvious that our attempts to illustrate the reality of our universe such as gravity shown as a ball going down a Coriolis drain pipe, are not only not true, but a pathetically bad idea that misleads the public into believing they are understanding gravity or rather the curvature of space around what we would call “mass.” Those examples should be banned.

It is the size of the universe that bothers me, and the fact that we appear to be nowhere and starting from nothing. Words are useless when trying to define the reality of the universe—an exercise for poets and philosophers. With that in mind, I had to think for about 50 years that “absolute nothing,” the total void of our reality, was the starting point for everything we call the universe, and that “absolute nothing” will exist nowhere and with no properties because it has no properties such as an elemental particle or photon.

## ONE RATIONAL THEORY and ONE INSANE THEORY

The “One Rational Theory” is that the effect could be that elemental particles would be able to “jump” in space, such as traveling in our universe without moving and without time. I suppose in the sci-fi movie, *Dune*, they call it folding space, except in reality space isn’t being folded. The premise is that there is no time if there is no space and no distance. I believe this happens to particles that we call leptons, provided the appropriate velocity, or rather inertia energy is reached. For now, I am theorizing that leptons can create a Higgs bubble or rather bubbles appear in their trail, almost endless Higgs bubbles, each of our moments throughout all universes in our Matryoshka chain creates a “Electron-Matryoshka-Cosmos” (Электрон-Матрёшка-Космос).

A Higgs bubble, created in the very fabric of our universe, is a void that has none of our universe’s properties. Since the bubble is a void, a particle that enters its terminator will pass through nothing. That is absolute nothing—a “Feldman Anomaly”—and since there is nothing in that space, it passes onto one surface and instantaneously out the opposing surface. It has not actually traveled faster than light, but completely instantaneously in our universe; it traveled through nothing therefore no distance was traveled.

This could allow particles, such as in an orbital, or particles flying off a decaying proton or neutron, to instantly jump from one location to another, without moving through our universe. The Higgs bubble would only last about  $10^{-14}$  seconds by our measure of time: it cannot cause much trouble except for the fact that they are created at the same rate that they are reabsorbed. Thus, the unseen universe does not spend its whole life jumping around and destroying the order that we have come to understand. Unless of course, the order that we understand is actually because of the many Higgs bubbles surrounding each atomic nucleus or following behind certain cosmic rays (for example).

## ONE RATIONAL THEORY – getting to the point.

With that idea, in September of 2021, I formulated and registered my concept of the Higgs bubble or rather, a void, the “Feldman Anomaly,” in our universe where absolutely nothing of our, or any, universe exists. Since these bubbles, or voids, contain no field of any type, our matter, or rather the energy defining our particles, would pass instantaneously through one—but they are not passing “through” it because it is not there. In less confusing words, a particle or the properties of a particle would enter one surface and instantaneously appear on the other side, depending on its trajectory. It would not pick up any new properties, and it would not know

that it has jumped a distance in space, in violation of the properties of our Higgs field universe. It does not leave our universe, because it has not disappeared by our measurement of time. Such as an electron jump.

The creation of Higgs bubbles would seem to be simple. A particle, fundamental or not, traveling at a certain minimum velocity, in other words, a certain inertia energy level, would leave behind a trail of bubbles in space. Such a bubble would be larger than an electron and exist in our universe for a period of one electron orbit or less before the Higgs field re-absorbs it or rather fills the void with Higgs properties.

## ONE INSANE THEORY

### The Электрон-Матрёшка-Космос

Now, switch my hypotheses and think about the “One Insane Theory.” Imagine that time, size, and energy exist, however, on an unimaginable scale. Do not think in terms of the impossible, such as that archaic movie from 1966, *Fantastic Voyage*, shrinking humans to the size of blood corpuscles, which meant that their atomic and molecular structure would have to shrink also, otherwise lungs and blood flow would not work. In our universe, size is, “what it is,” and we can’t make jumbo protons or micro-sized human.

The Big Bang is a singularity that exploded (or expanded) to become our universe, that up to now we imagine expanding into the infinite in time and space. Yet, it started at a specific time and a specific place (of which both existed only after the fact) in our universe. No one has seemed to figure where—however; it seems to be possible to determine “when” by our measure of time.

The confirmed and measured background radiation has prevented us from thinking along certain ideas, such that the reason for the existence of that radiation will not be violated.

I would like to toss in my own, “One Insane Theory,” and leave you with a sense of hopelessness. I believe I can get us one step closer to an understanding of the ultimate answer to life, the universe, and everything, of which the answer will not be 42. But don’t panic. Perhaps the universe is not incredibly old at all—only appearing old due to our measure of time. I have always figured that we have no understanding of time, or space-time as it is now called, and no good theory on how far we can travel into the apparently endless distance of our universe—with theories more insane than mine. My suspicion is that our universe, as all universes are, is very small and not without end.

It is with great difficulty that I will attempt to present my “One Insane Theory,” and in doing so, it is possible the reality of our universe exists from start to finish within the time span less than the orbital time of a single electron within our universe by our measure of time.

Perhaps elemental particles do not pass instantly through a Higgs bubble (a Feldman Anomaly) with no quantum presence but rather enter it and remain captured. However, due to the size we are talking about, let’s say 1% or less might remain captured in a large Higgs bubble, and 99% of the Higgs bubbles might be too small to capture a particle. Therefore, it would be an exceedingly rare event, but possible. A singularity in the bubble ends up in a total void of absolutely everything and anything—a Feldman Anomaly.

I do not believe in infinity. We use that concept because our numbering system allows us to count by simply adding one more number to the last. Thus, we believe we can travel through space forever, but with no proof that the space in our universe goes on forever. Would the “Electron-Matryoshka-Cosmos” [expressed in English] inside Higgs bubbles continue forever, or would they all collapse back into the one primeval particle that started it all? Perhaps one more action backwards and all of existence disappears never to exist again and therefore nothing would exist to reveal a memory of it.

Let us get a large enough Higgs bubble, a total void of all quantum physics properties (a Feldman Anomaly), and capture a single electron in its singularity state. That singularity within a Higgs bubble would be the start of a universal-sized Big Bang. That interior would appear “infinite” by our definition, to that singularity point of energy or quantum state, and that energy becomes enough to create an entire universe in size, energy, and life span—creating a Kcymaerxthaere, if you will. The life span of the bubble would be less than  $10^{-17}$  seconds (I estimate  $10^{-14}$  of our seconds), but to the singularity created universe within, the time span would be as our universe appears to us now—per our perception of time—billions of years. This is enough time to create atoms, stars, heavier elements, planets and then life where possible.

The bubbles that we detect will collapse instantly by our perception of time, but take billions of years (yes, using the earth years within another universe is stupid, but we need a baseline) to the expanding energy within the bubble. This would be exactly what we are experiencing now, as our universe must also exist inside a Higgs bubble itself. Not a shrunken universe, a full-size universe because we cannot shrink atoms, but quantum physics can create the apparent infinite within a total void of a Higgs bubble, perhaps only  $10^{-18}$  meters or less in diameter, as measured in our universe.

I would say that we might obtain a more accurate age of a universe by using an electron within our perception of time. Let's say the singular orbit of an electron and the Higgs bubbles that trail it could account for the creation of several universes, starting with a singularity of one electron exploding to fill the void with its own time frame of billions of our years, but collapsing out of existence in less than  $10^{-14}$  of our seconds by our perception of time. The collapse of those bubbles will return the captured electron to its original universe within our time span, but by billions of our earth years (as a point of reference) in the Higgs bubble's interior, by its perception of time. That would mean the birth and death of an entire universe such as ours, within the Bubble's short life of  $10^{-14}$  seconds—of our seconds.

When our universe collapses, a singularity the size of an electron will reappear in its original universe, found still captured by its atomic nucleus. Thus, energy is preserved. However, by my estimates (not by math), I would say that within each second in our expanse of our universe, by our measure, or perception, of time, there would be  $10^{81} \times 10^{14}$  entire universes created by a Big Bang, evolving into atomic particles, then stars, heavy elements, planets, galaxies and evolving intelligent life before the bubbles collapse and returns all the singularities back to our universe. What is difficult to imagine is that within those universes, Higgs bubbles are capturing a singularity and creating more universes, each with its own perception of time aging as our universe does. This would be an almost endless “Electron-Matryoshka-Cosmos” of universes within universes with our perception of time shrinking within each.

We must assume that our universe is not unique in age, because of the anthropic principle, not in size, which correlates with its age. We must assume that our galaxy is not located in the imagined center of it all, due to the Big Bang ejecting everything outward from its center. Our galaxy is most likely not at the extreme edge of our universe due to background radiation and the detection that we are surrounded by millions of galaxies.

While scientists speak of a “dark matter,” an attraction causing our universe to be pulled outward or repelling against its own matter, we might be seeing the attraction of our “matter” to the realm beyond the terminus of our Higgs bubble. There is an immense amount of matter out there—an entire universe like our own but with its own measurement of time.

With a rough estimate of  $10^{80}$  atoms in our universe (please correct if estimate is incorrect), it would give us an estimate of  $10^{81}$  electrons (please correct if estimate is incorrect) because, at that power, increasing the power of ten by one is extremely large. Now, we need an equation, for which I am grateful to Dr. Frank Drake, for the Drake equation. It is a great equation, and all we need to do is substitute the factors of each unknown with the attributes of our Higgs bubble universe within “One Insane Theory.”

# USING THE DRAKE EQUATION, 1961, MODIFIED

From the meeting of the Order of the Dolphin, November 1961, we were gifted with the Drake equation from Dr. Frank Drake (and maybe unknown others). I am using my personal committee print, "*The Possibility of Intelligent Life Elsewhere in the Universe.*" November 1975: *Report prepared for the Committee on Science and Technology U.S. House of Representatives, Ninety-Fourth Congress.* U.S. Government Printing Office.

As found on page six of the above-mentioned report, the Drake equation is as follows (I corrected a printing office typo):

$$N=R*f_p*n_e*f_l*f_i*f_cL$$

In its original form (abbreviated):

**N** is the number of extant civilizations possessing interest and the capability for interstellar communication.

**R\*** is the average rate of star formation in our galaxy.

**f<sub>p</sub>** is the fraction of stars with planetary systems.

**n<sub>e</sub>** is the mean number of planets in each planetary system favorable for life.

**f<sub>l</sub>** is the fraction of suitable planets on which life develops.

**f<sub>i</sub>** is the fraction of life-bearing planets on which intelligence and manipulative ability appear.

**f<sub>c</sub>** the fraction of planets on which an advanced technical civilization evolves.

**L** is the lifetime of the technical civilization.

Converting the Drake equation into a useful Higgs bubble equation:

$$N=R*f_c*n_c*f_l*f_m*f_rL$$

**N** is the number of new universes within bubbles per our measurement of time that exist long enough to create and evolve intelligent life and the metrology to discover the Higgs field. Use the units of one earth second.

**R\*** is the number of Higgs bubbles created per second per atom that are large enough to capture an elementary particle. Bubble size greater than  $2.43 \times 10^{-12}$  m the Compton wavelength. Use one per orbit on a hydrogen atom =  $10^{-16}$  seconds.

**f<sub>c</sub>** is the number of Higgs bubbles that capture one elemental particle. Expect to be rare so use per second (approximately  $10^{16}$  orbitals) per atom/electron.

**n<sub>c</sub>** is the life span of the Higgs bubble in our clock time reference that captured an electron which is long enough for a new universe to exist, according to anthropic observations as noted by Robert Dicke, 1961. However, the bubble must disappear before the next orbit. Start at (75%) of the period of one electron orbital of a hydrogen electron =  $(1.5 \times 10^{-16} \text{ s.}) \times .75$ .

**f<sub>l</sub>** is the probability that life will be created anywhere within the new Higgs bubble universe, given as a fraction such as 1/1,000,000 per successful capture, or use the original Drake equation.

**f<sub>m</sub>** is the amount of life that has manipulative abilities to alter its environment for other than survival. Reference the Drake equation estimates. Estimate one per galaxy for 2 trillion galaxies.

**f<sub>r</sub>** is the number of civilizations that also have the resources required to build metrology needed in scientific fields and non-religious conduct to examine atomic particles. Use 50% until better data is derived.

**L** is the lifespan of technical life with organized civilizations. Use human life on the earth with predictions of future extinction. Due to natural climate fluctuations and the warring of humans, I would estimate 300 years (using 1890 as a starting point).

I make no claim that the above equation and values are absolute, and I welcome learned input for corrections or deviations on the above equation that I so crudely tinkered together.

The smallest amount of energy within a Higgs bubble, such as an electron singularity, is enough to start a universe—our universe. Our own Big Bang event occurred, not from an impossibly large and heated energy source, but from the absolute smallest, injected into a total, nearly infinite void of all quantum physics of space and time.

Where are we? If we are indeed inside a Higgs bubble, we will never know it, and the death of our known universe started the moment it began. When our bubble collapses, we will disappear, located nowhere, in a universe that is one of so many. A complete life, from Big Bang to its death,  $10^{-14}$  seconds by our perception of time—our starting energy no greater than an electron. What we as humans became, our history, our knowledge, and our trials and tribulations, will be gone in an instant of what we call time.

Perhaps within the void of the bubbles, and in the instant the bubbles start and end, are entire universes such as ours, created from a singularity in the emptiness of nothing, located nowhere. All intelligent life wondering if they are alone and believing they are special and unique—yet they are not.

“So close, the infinitesimal and the infinite. But suddenly I knew they were really the two ends of the same concept. The unbelievably small and the unbelievably vast eventually meet, like the closing of a gigantic circle. I looked up, as if somehow, I would grasp the heavens, the universe, worlds beyond number. God’s silver tapestry spread across the night. And in that moment, I knew the answer to the riddle of the infinite. I had thought in terms of Man’s own limited dimension. I had presumed upon Nature. That existence begins and ends is Man’s conception, not Nature’s.”<sup>2</sup>

<sup>1</sup> *Forbidden Planet*. 1956

<sup>2</sup> *Jack Arnold. The Incredible Shrinking Man*. 1957

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